

# A FEW NOTES ON WATERBODY DEFINITIONS

WQSAC MEETING

February 9, 2004

# Statewide Waterbody Catalog

- GIS – based
- Uses National Hydrography Dataset
- Catalogs all NH waterbodies
- First version used for 2002 305(b) report
  - 1:100K NHD
  - Lots of inaccuracy, no wetlands
- Second version – under development
  - 1:24K NHD
  - Concise waterbody definitions

# Surface Waters Definition

From WQ standards Env-Ws 1702.46

“ Surface waters of the state” in RSA 485-A:2

AND

“Waters of the US” in 40 CFR 122.2

# NH Waterbody Types

- Ocean
- Estuary
- River / Stream
- Impoundment
- Lake / Pond
- Wetland

# Oceans

- Waters seaward of a chord drawn from headland to headland
  - Already done by EPA
  - No more definition work needed

# Estuaries

- Waters with tidal influence on the landward side of a chord drawn from headland to headland
  - To “head of tide”
  - Concise definition where there is a tidal dam
  - Definition needs a little thought where there is no tidal dam
    - Good literature
  - Boundary with wetlands needs work

# Rivers

- Free-flowing, unimpounded rivers
  - Boundary with head of impoundments needs work
  - Boundary with wetlands needs work
  - Boundary with lakes needs work

# Impoundments

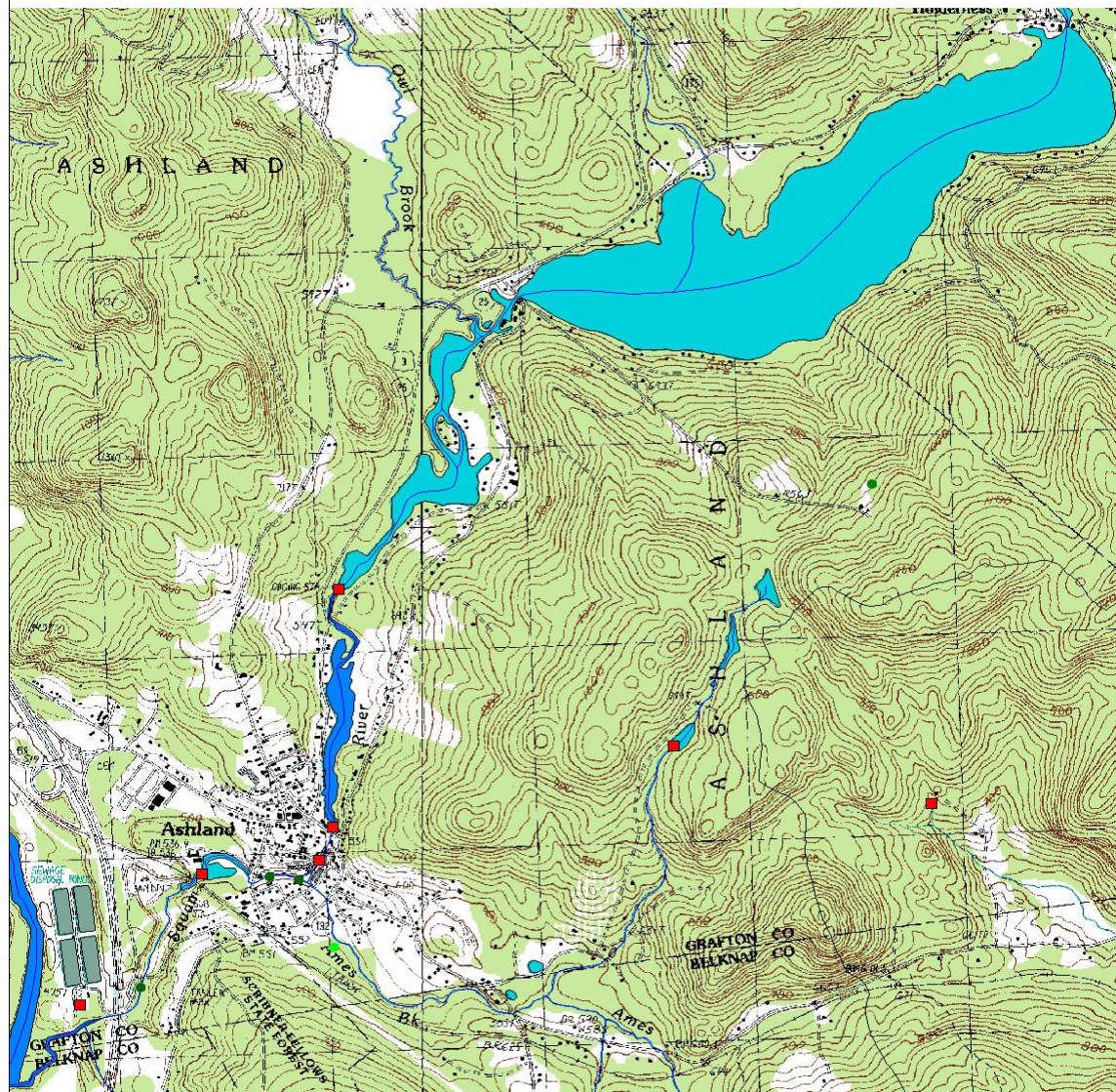
- Waterbodies created by a dam on a river
  - Difference between an impoundment and a lake raised by a dam needs work
  - Boundary between head of impoundment and river needs work



# Lakes

- Lake = Pond for definition purposes
- Includes lakes raised by dams
- Difference between an impoundment and a lake raised by a dam needs work
- Boundary with upstream tribs needs work
- Boundary with wetlands needs work

# 24K NHD



## Dams

- ACTIVE
- BREACHED
- EXEMPT
- NOT BUILT
- PENDING
- REMOVED
- RUINS

nhnhd\_01070001shp - Waterbody (nhd.region.wb)

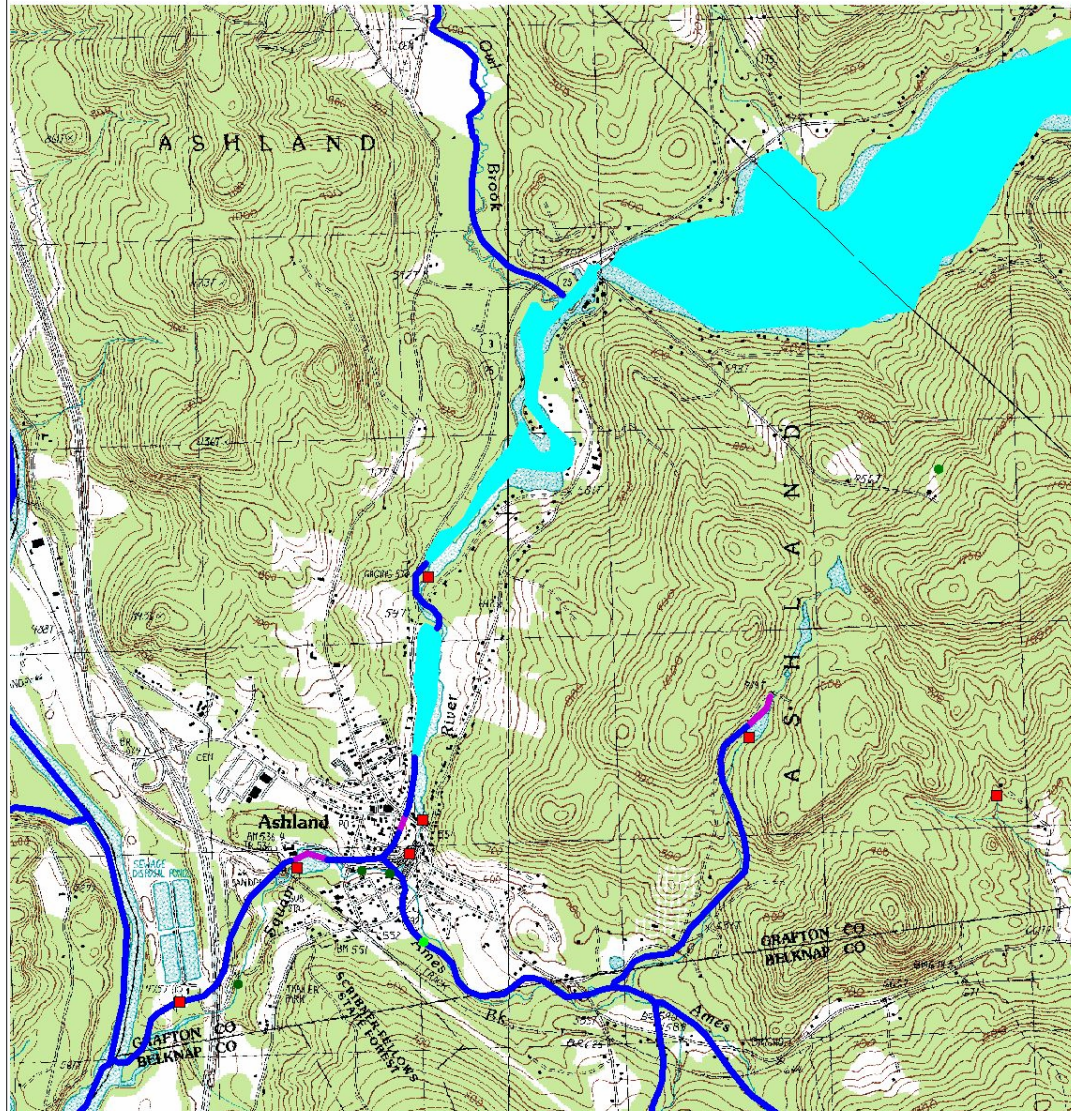
- LAKE/POND
- RESERVOIR
- STREAM/RIVER
- SWAMP/MARSH

0.25 0 0.25 0.5 Miles





# NHDES Assessment Units Indexed to the 100K NHD



## Dams

- ACTIVE
- BREACHED
- EXEMPT
- NOT BUILT
- PENDING
- REMOVED
- RUINS

## Squam-lines.shp

- IMPOUNDMENT
- LAKE
- RIVER/STREAM

## Squam-polygons.shp

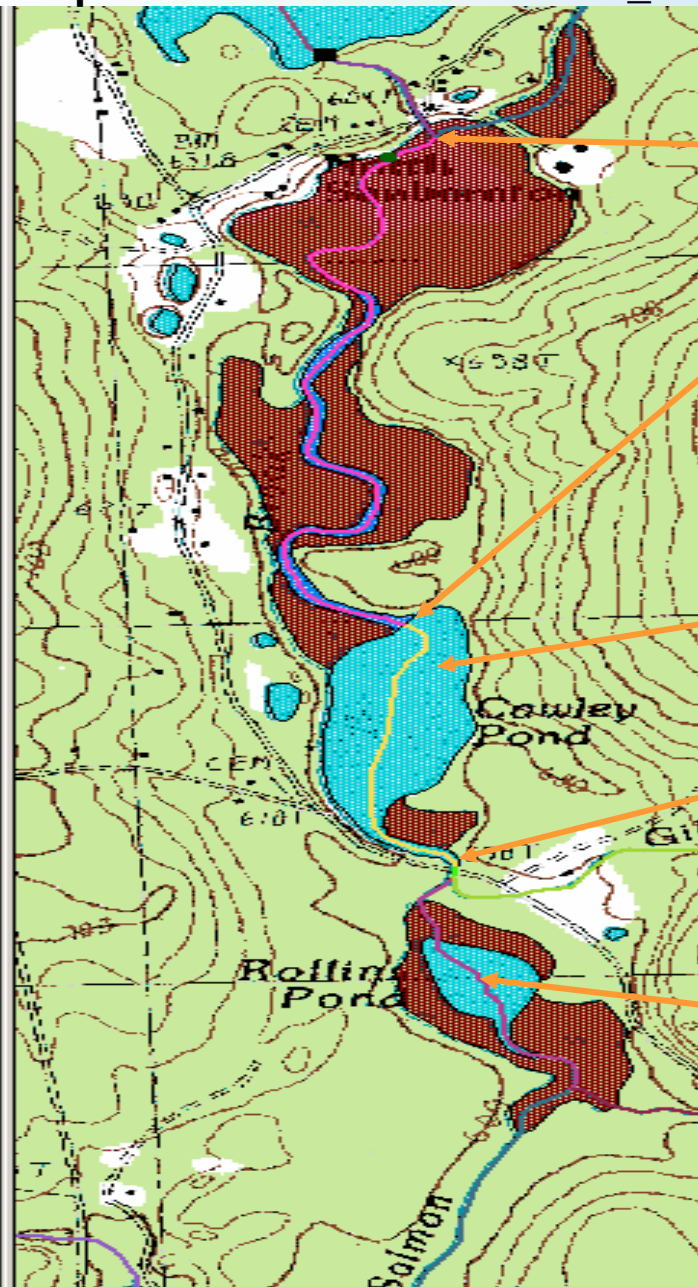
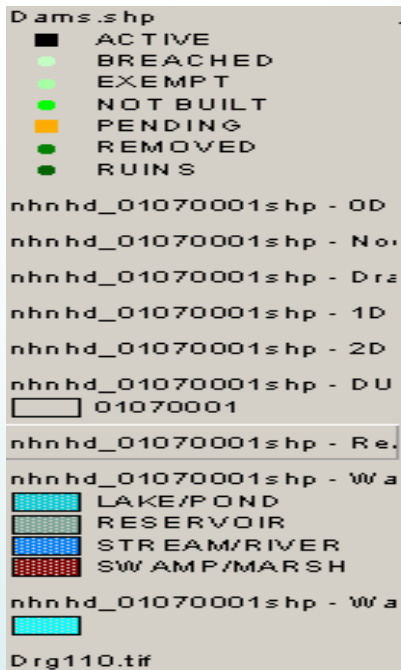
- LAKE

0.25 0 0.25 0.5 Miles





## Each new line color represents a new NDH Reach\_ID



One stream reach, surrounded by marsh land. Downstream portion is wide enough to also have a stream polygon.

Cawley Pond is large enough (>10 acres) to have its own transport reach (yellow).

Note tiny stream reach between Cawley Pond Outlet and inflow of Giles Brook from the east.

Rollins Pond is <10 acres and therefore does not get its own transport reach.\*\*\*

